

Application No. 09/804,287
 Amendment Dated September 23, 2005
 Reply to Office Action of August 2, 2005

AMENDMENTS TO THE CLAIMS:

The listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS:

1. (Currently Amended) In a radiolucent patient support table including substantially planar top and bottom surfaces held apart in an opposed relationship, a medical appliance support interface for selectively connecting an associated medical appliance to the table, the interface comprising:

a non-planar first connection area defined by a first portion of said top surface of the support table, the first connection area being shaped to provide a first supporting force against an associated medical appliance in a first direction substantially parallel to the top and bottom surfaces, and a second supporting force against the associated medical appliance in a second direction substantially perpendicular to the top and bottom surfaces, wherein said first connection area includes at least one recess defined between a pair of wall surfaces that converge at a bight of the at least one recess; and,

a second connection area defined by a second portion of said table and shaped to provide a third supporting force against the associated medical appliance in a third direction substantially parallel to the top and bottom surfaces, and a fourth supporting force against the associated medical appliance in a fourth direction substantially perpendicular to the top and bottom surfaces, wherein said second connection area includes a substantially planar surface held at an oblique angle relative to said substantially planar top and bottom surfaces; and,

a rounded lip area formed between said at least one recess and said substantially planar surface, the rounded lip area defining a crest located between said bight and a plane defined by the top surface of the patient support table.

2. (Canceled)

3. (Canceled)

4. (Canceled)

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5. (Currently Amended) The medical appliance support interface according to claim [[4]] 1 wherein said rounded lip area is spaced apart from the plane defined by the top surface by a predetermined distance.

6. (Previously Presented) A surgical table comprising:
a base member;
a column connected with the base member;
a rectangular radiolucent patient support member carried on the column, the patient support member defining substantially planar top and bottom surfaces; and,
a low radiographic shadow accessory connection interface defined by a plurality of curved surfaces of the patient support member along at least one edge of the patient support member for selectively connecting an associated accessory to the patient support member, the plurality of curved surfaces being without planar portions oriented in a substantially perpendicular relation to said planar top surface of the patient support member so that first portions of an associated x-ray signal passing through the connection interface along a path substantially perpendicular to the planar top surface are attenuated substantially the same as second portions of the x-ray signal passing through the patient support member.

7. (Previously Presented) The surgical table according to claim 6 wherein said plurality of curved surfaces of the low shadow connection interface includes a first connection area adjacent the planar top surface of the patient support member and a second connection area extending between the first connection area and the bottom surface of the patient support member, the first connection area including a curved lip surface and the second connection area including a planar locating surface disposed in a non-perpendicular relation with said planar top surface.

8. (Original) The surgical table according to claim 7 wherein the first connection area includes a curved recess surface formed in said planar top surface of the patient support member adjacent said curved lip surface.

9. (Original) The surgical table according to claim 8 wherein the curved

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recess surface formed in said planar top surface is defined by a pair of opposed spaced apart concave wall surfaces formed in the planar top surface of the patient support member adjacent said curved lip surface.

10. (Original) The surgical table according to claim 9 wherein:
the curved recess surface formed in the planar top surface defines a groove having a first radius r ; and,
the curved lip surface defines a ridge having substantially said first radius r .

11. (Original) The surgical table according to claim 9 wherein the curved recess surface includes a planar intermediate surface extending between said spaced apart concave wall surfaces, the planar intermediate surface being substantially parallel with the planar top surface of the patient support member.

12. (Original) The surgical table according to claim 7 wherein the planar locating surface extends at an angle of about 50° relative to the top and bottom surfaces of the patient support member.

13. (Original) The surgical table according to claim 7 wherein:
the top surface of the patient support member defines a first plane; and,
the curved lip surface is disposed entirely on a side of said first plane containing said patient support member.

14. (Previously Presented) The surgical table according to claim 7 further comprising:
a third connection area between said second connection and said bottom surface of the patient support member, the third connection area including a downwardly directed curved ridge extending from the bottom surface of the patient support member in a direction opposite from said curved lip surface of said first connection area.

15. (Original) The surgical table according to claim 7 wherein the rectangular radiolucent patient support member includes a plurality of selectively

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intermateable support member portions including a body and leg support section connected with said column, a headrest section pivotally attached with the body and leg support sections, and a cardio-vascular extender member selectively attachable to the body and leg support section.

16. (Previously Presented) The surgical table according to claim 7 wherein the column includes:

a vertical column member suspended from overhead by a ceiling of an associated surgical room; and,

a generally horizontally oriented support bar for pivotally connecting the patient support member with the vertical column member, the support bar being vertically movable relative to the column member to enable positioning of the patient support member relative to a floor of the associated surgical room.

17. (Currently Amended) In a radiolucent patient support table including substantially flat top and bottom surfaces held apart in an opposed relationship, a medical appliance support interface for selectively connecting an associated medical appliance to the table, the interface comprising:

a curved first connection area defined by a first portion of said top surface of the support table, the first connection area being shaped to provide a first supporting force against an associated medical appliance in a first direction substantially parallel to the top and bottom surfaces, and a second supporting force against the associated medical appliance in a second direction substantially perpendicular to the top and bottom surfaces, wherein said first connection area includes at least one recess defined between a pair of wall surfaces that converge at a bight of the at least one recess;

a second connection area defined by a second portion of said table and shaped to provide a third supporting force against the associated medical appliance in a third direction substantially parallel to the top and bottom surfaces, and a fourth supporting force against the associated medical appliance in a fourth direction substantially perpendicular to the top and bottom surfaces, wherein said second connection area includes a substantially planar surface held at an oblique angle relative to said substantially planar top and bottom surfaces; and,

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a rounded lip area formed between said at least one recess and said substantially planar surface, the rounded lip area defining a crest located between said bight and a plane defined by the top surface of the patient support table.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Previously Presented) A medical appliance interface in a patient support table for creating forces on an associated medical appliance to support the associated medical appliance relative to the table, the medical appliance interface comprising:

a table top having, on opposite sides of the table top, a substantially flat upper surface and a substantially flat lower surface;

a groove defined by a portion of said upper surface, the groove being spaced from an upper edge of the table top defined by said upper surface;

a ridge defined by a portion of said lower surface, the ridge being disposed at a lower edge of the table top defined by said lower surface and extending beyond said substantially flat lower surface; and,

a substantially flat side surface extending between said upper edge of the table top and said lower edge of the table top, the upper, lower, and side surfaces together with said groove and said ridge creating forces supporting the associated medical appliance relative to the table when the associated appliance is connected with the patient support table.

22. (Previously Presented) The medical appliance support interface according to claim 21 wherein said substantially flat side surface defines a beveled edge of said table top.

23. (Previously Presented) The medical appliance support interface

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according to claim 21 wherein the table top includes a foam core surrounded by an outer layer of carbon fibers.

24. (Previously Presented) The medical appliance support interface according to claim 21 wherein said substantially flat side surface is held at an oblique angle relative to at least one of said upper surface and said lower surface of said table top.

25. (Previously Presented) The medical appliance support interface according to claim 21 wherein:

said groove is an elongate groove extending substantially the length of said table top; and,

said ridge is an elongate ridge extending substantially the length of said table top.

26. (Previously Presented) The medical appliance support interface according to claim 21 wherein the elongate groove is a recess defined between a pair of concave wall surfaces that converge at a bight area.

27. (Canceled)

28. (Previously Presented) The medical appliance support interface according to claim 21 wherein said groove and said ridge are defined by exclusively curved surfaces.

29. (Previously Presented) The medical appliance support interface according to claim 21 wherein:

said flat upper surface of the table top defines a plane;

said groove formed by said portion of the upper surface is a recess defined between a pair of concave wall surfaces that converge at a bight area formed by said portion of the upper surface, the bight area being spaced apart from said plane defined by the upper surface; and,

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said upper edge of the table top terminates at a location between said bight area and said plane.

30. (Currently Amended) A medical appliance support interface for use with an associated radiolucent patient support table including substantially planar top and bottom surfaces held apart in an opposed relationship for selectively connecting an associated medical appliance with the table, the medical appliance support interface comprising:

a non-planar first connection area defined by the associated table, the first connection area being shaped to provide a first supporting force against the associated medical appliance in a first direction substantially parallel to the top and bottom surfaces, and a second supporting force against the associated medical appliance in a second direction substantially perpendicular to the top and bottom surfaces, wherein said first connection area includes at least one recess defined between a pair of wall surfaces that converge at a bight of the at least one recess; and,

a second connection area defined by the associated table and shaped to provide a third supporting force against the associated medical appliance in a third direction substantially parallel to the top and bottom surfaces, and a fourth supporting force against the associated medical appliance in a fourth direction substantially perpendicular to the top and bottom surfaces; and,

a rounded lip area formed between said at least one recess and said substantially planar surface, the rounded lip area defining a crest located between said bight and a plane defined by the top surface of the patient support table.

31. (Canceled)

32. (Canceled)

33. (Currently Amended) The medical appliance support interface according to claim ~~[[32]]~~ 30 wherein said rounded lip area is spaced apart from the plane defined by the top surface by a predetermined distance.

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34. (Previously Presented) The medical appliance support interface according to claim 30 wherein said second connection area includes a substantially planar surface held at an oblique angle relative to said substantially planar top and bottom surfaces.

35. (Previously Presented) A surgical table comprising:
a base member;
a column connected with the base member;
a patient support member carried on the column, the patient support member including substantially planar top and bottom surfaces; and,
an accessory connection interface defined by a plurality of curved surfaces of the patient support member along at least one edge of the patient support member for selectively connecting an associated accessory to the patient support member, the plurality of curved surfaces being without planar portions oriented in a substantially perpendicular relation to said planar top surface of the patient support member so that first portions of an associated x-ray signal passing through the connection interface along a path substantially perpendicular to the planar top surface are attenuated substantially the same as second portions of the x-ray signal passing through the patient support member.

36. (Previously Presented) The surgical table according to claim 35 wherein said plurality of curved surfaces of the accessory connection interface include a first connection area adjacent the planar top surface of the patient support member and a second connection area extending between the first connection area and the bottom surface of the patient support member, the first connection area including a curved lip surface and the second connection area including a planar locating surface disposed in a non-perpendicular relation with said planar top surface.

37. (Previously Presented) A surgical table comprising:
a base member;
a column connected with the base member;
a patient support member carried on the column, the patient support member

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including substantially planar top and bottom surfaces and a plurality of curved surfaces defining an accessory connection interface formed along at least one edge of the patient support member for selectively connecting an associated accessory to the patient support member, the plurality of curved surfaces being without planar portions oriented in a substantially perpendicular relation to said planar top surface of the patient support member so that first portions of an associated x-ray signal passing through the connection interface along a path substantially perpendicular to the planar top surface are attenuated substantially the same as second portions of the x-ray signal passing through the patient support member, the plurality of curved surfaces including a first connection area adjacent the planar top surface of the patient support member and a second connection area extending between the first connection area and the bottom surface of the patient support member, the first connection area including a curved lip surface and a curved recess surface formed in said planar top surface of the patient support member adjacent said curved lip surface, and the second connection area including a planar locating surface disposed in a non-perpendicular relation relative to said planar top surface.

38. (Previously Presented) The surgical table according to claim 35 wherein the planar locating surface extends at a selected angle relative to the top and bottom surfaces of the patient support member.

39. (Previously Presented) A surgical table comprising:
a base member;
a column connected with the base member;

a patient support member carried on the column, the patient support member including substantially planar top and bottom surfaces and a plurality of curved surfaces defining an accessory connection interface along at least one edge of the patient support member for selectively connecting an associated accessory to the patient support member, the plurality of curved surfaces:

being without planar portions oriented in a substantially perpendicular relation to said planar top surface of the patient support member so that first portions of an associated x-ray signal passing through the connection interface

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along a path substantially perpendicular to the planar top surface are attenuated substantially the same as second portions of the x-ray signal passing through the patient support member;

including a first connection area adjacent the planar top surface of the patient support member and a second connection area extending between the first connection area and the bottom surface of the patient support member, the first connection area including a curved lip surface and the second connection area including a planar locating surface disposed in a non-perpendicular relation with said planar top surface; and,

including a third connection area between said second connection and said bottom surface of the patient support member, the third connection area including a downwardly directed curved ridge extending from the bottom surface of the patient support member in a direction opposite from said curved lip surface of said first connection area.